EXECUTIVE SUMMARY

This report summarizes the results of plant tissue (tree cores, fresh fruit, canned fruit, fresh alfalfa, and hay) analysis for samples collected from private residences in Clinton and Sunset, Utah from August through November 2001. The objective of this study was to conduct a preliminary screening assessment to determine the potential occurrence of trichloroethylene (TCE) in plant tissue. The locations from which the samples were collected were based on specific requests from individual landowners, and included sites thought to be within and outside the plume boundaries. The samples were collected and analyzed by Utah Water Research Laboratory (UWRL) staff under direction of William Doucette, Ph.D.

TCE was found in a number of the tissue samples at concentrations ranging from the method detection limit of 0.001 parts per million (ppm) (wet weight) to 0.018 ppm (wet weight). Although this study was conducted as a screening level assessment, and the data should be used for qualitative purposes only (data should not be used to assess health based risk), these results suggest that TCE may be present in plant tissue. Hill Air Force Base (Hill AFB) is continuing to work with Utah State University (USU) and other contractors to develop method specific criteria for documenting precision and accuracy of the plant tissue analysis method. Hill AFB's ultimate goal is to be able to collect definitive data that can be used quantitatively to document the presence or absence of TCE and evaluate human health risk.